

**REPLY/AMENDMENT  
FEE TRANSMITTAL**



Attorney Docket No. 95-304

Application Number 09/495,122

Filing Date February 1, 2000

First Named Inventor WILLER

Group Art Unit 2643

**RECEIVED**

MAR 18 2004

AMOUNT ENCLOSED

\$ 0

Examiner Name

PHAM, Tuan

Technology Center 2600

**FEES CALCULATION** (fees effective 10/01/2001)

CLAIMS AS AMENDED	Claims Remaining After Amendment	Highest Number Previously Paid For	Number Extra	Rate	Calculations
TOTAL CLAIMS	12	20	0 <sup>(3)</sup>	X \$18.00 =	\$0
INDEPENDENT CLAIMS	2	2	0	X \$84.00 =	\$0
Since an Official Action set an <u>original</u> due date of <u>December 30, 2003</u> , petition is hereby made for an extension to cover the date this reply is filed for which the requisite fee is enclosed (1 month (\$110); 2 months (\$400); 3 months (\$920); 4 months (\$1,440); 5 months (\$1,960));					\$0
If Statutory Disclaimer under Rule 20(d) is enclosed, add fee (\$110)					+ \$0
				Total of above Calculations =	\$0
Reduction by 50% for filing by small entity (37 CFR 1.9, 1.27 & 1.28)					-
				<b>TOTAL FEES DUE =</b>	<b>\$0</b>

(1) If entry (1) is less than entry (2), entry (3) is "0".  
 (2) If entry (2) is less than 20, change entry (2) to "20".  
 (4) If entry (4) is less than entry (5), entry (6) is "0".  
 (5) If entry (5) is less than 3, change entry (5) to "3".

**METHOD OF PAYMENT**

Check enclosed as payment.  
 Charge "TOTAL FEES DUE" to the Deposit Account No., below.

**AUTHORIZATION**

If the above-noted "AMOUNT ENCLOSED" is not correct, the Commissioner is hereby authorized to credit any overpayment or charge any additional fees under 37 CFR 1.16 or 1.17 necessary to maintain pendency of the present application to:

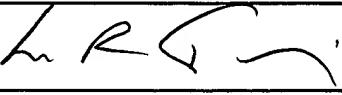
Deposit Account No.:

50-0687

OrderNo.: (Client/Matter)

95-304

**SUBMITTED BY: MANELLI DENISON & SELTER PLLC**

Typed Name	Leon R. Turkevich	Reg. No.	34,035
Signature		Date	March 17, 2004

Docket No.: 95-304



PATENT

#10

3/24/04

JK

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

:

WILLER

:

Serial No.: 09/495,122

:

Group Art Unit: 2643

Filed: February 1, 2000

:

Examiner: PHAM, Tuan

For: APPARATUS AND METHOD OF COUPLING HOME NETWORK SIGNALS  
BETWEEN AN ANALOG PHONE LINE AND A DIGITAL BUS

RESPONSE

**RECEIVED**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

MAR 18 2004

Technology Center 2600

Sir:

In response to the Official Action mailed December 18, 2003, Applicant hereby submits the following remarks.

Reconsideration and allowance of the above-referenced application are respectfully requested. Claims 1-12 are pending in the application.

Claims 1 and 2 stand under 35 USC §103 in view of U.S. Patent No. 5,050,190 to Shimada et al. in view of U.S. Patent No. 6,038,300 to Hartmann et al. This rejection is respectfully traversed.

As admitted in the Official Action, "Shimada et al. fails to teach a connecting [sic] of a high pass filter between the four-wire bus and a two-wire analog telephone line." Moreover, Shimada et al. fails to provide any disclosure whatsoever of any two-wire analog telephone line, as claimed.

Response filed March 17, 2004

Appln. No. 09/495,122

Page 1

In particular, Shimada et al. describes in Figures 4A and 4B a four-wire bus 60 having a two-wire transmit bus 61 and a two-wire receive bus 62. The two-wire transmit bus 61 is configured for transmitting a digital signal having been output by a driver 52 in the termination unit 100 (see col. 1, line 66 to col. 2, line 1), and the two-wire receive bus 62 is configured for transmitting a digital signal having been output by an ISDN terminal for reception by the receiver 30 in the termination unit 100 (see col. 2, lines 1-7). An example of the digital signals (AMI codes) are illustrated in Figure 5 (see col. 2, lines 24-27).

As apparent from the foregoing, Shimada et al. neither discloses nor suggests the claimed two-wire analog telephone line which is distinct from the claimed four-wire bus. Hence, the assertion that Shimada et al. discloses “transmitting network data signals between a first network node coupled to the four wire bus and a second network node coupled to the two-wire analog telephone line” is erroneous, since Shimada et al. explicitly describes that all ISDN terminals 70 are coupled to the four wire bus 60 that includes the transmit bus 61 and the receive bus 62 (see col. 2, lines 15-20).

Hence, Shimada et al. neither discloses nor suggests the claimed two-wire analog telephone line which is distinct from the claimed four-wire bus.

Further, the Official Action fails to provide any evidence why one having ordinary skilled in the art would have been motivated to modify Shimada et al. in order to include the teachings of Hartmann et al. “The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.” In re Fritch, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992).

In particular, the Official Action asserts:

[I]t would have been obvious ... to incorporate the use of connecting of a high pass filter between the four-wire bus and a two-wire analog telephone line, as taught by Hartmann, into [sic] view of Shimada in order to provide both voice and data services to subscriber at his or her premises.

However, as described above Shimada et al. does not disclose nor suggest a two-wire analog telephone line, but only a four-wire bus. Further, Shimada et al. already discloses that the four-wire bus can be shared by voice and data services: "The intergrated services digital network (hereinafter referred to as ISDN) can be regarded as a system for realizing various communications such as telephone, facsimile communication, data communication and image communication in a digitized network." (Col. 1, lines 17-21).

Hence, one skilled in the art would not need to add the teachings of Hartman et al., since Shimada et al. already provides both voice and data services.

Further, one of ordinary skill in the art would avoid combining the teachings of Shimada et al. and Hartmann et al., since the respective teachings are mutually exclusive.

Hartmann et al. describes a four-wire cable that provides two channels of analog voice-grade telephony (see col. 3, lines 13-28 and 58-60). Hartmann et al. teaches connecting a high pass filter 230 between a corresponding pair (e.g., P1) of the four-wire cable (having pairs P1 and P2) to derive four channels C1, C2, C3, C4 (col. 3, lines 25-39), namely two voice channels (VOICE\_1, VOICE\_2), and two data channels (DATA\_1, DATA\_2) (see col. 3, line 55 to col. 4, line 3 and Figs. 3, 4).

Hence, Hartmann et al. teaches that a personal computer (PC) can transfer data on either data channel DATA\_1 via pair P1, or data channel DATA\_2 via pair P2 (see Fig. 3); in addition,

Response filed March 17, 2004

Appln. No. 09/495,122

Page 3

internal telephones (T1, T2, AT1, AT2) can use either voice channels VOICE\_1, VOICE\_2 via respective pairs P1, P2, based on switching control in the controller 200 (see col. 3, line 62 to col. 4, line 11).

However, Hartmann et al. neither discloses nor suggests a four-wire bus including a two-wire send path and a two-wire receive path for sending and receiving ISDN-based signals, as claimed. Rather, Hartmann et al. is limited to providing data and voice channels via two pairs of analog telephone lines.

Further, Shimada et al. already has a solution for providing data and voice channels via a four-wire ISDN line.

Hence, there is no motivation to combine Shimada et al. with Hartmann et al. because they employ distinct telephony technologies for providing data and voice services. There is no disclosure or suggestion whatsoever that would motivate one skilled in the art to add a two-wire analog telephone line to a four-wire ISDN bus, as claimed.

Hence, there is no disclosure or suggestion in Shimada et al. or Hartmann et al., singly or in combination, to connect a high pass filter between the four-wire bus and a two-wire analog telephone line, and transmitting network data signals between a first network node coupled to the four wire bus and a second network node coupled to the two-wire analog telephone line, as claimed.

For these and other reasons, the §103 rejection of claim 1 should be withdrawn.

Claim 2 stands rejected under 35 USC §103 in view of Shimada et al., Hartmann et al., and U.S. Patent No. 5,841,841 to Dodds. This rejection is respectfully traversed.

Dodds et al. neither discloses nor suggests isolating capacitive influences of each of the connected terminal devices from the two-wire send path by adding a common mode choke, as claimed. Rather, Dodds et al. uses a relatively expensive and bulky transformer 27 and capacitors 31 to: (1) prevent DC current from passing from the telephone line 10 to the LAN interface (col. 8, lines 52-55); and (2) reduce the peak-to-peak voltage of the LAN signals (e.g., 8 volts) to a reduced peak-to-peak voltage (e.g., 1 volt) on the telephone line using a presdribed step-down ratio (e.g., 8:1) (col. 8, lines 56-63).

Moreover, Dodds et al. teaches that the high pass filter 30 used to attenuate voice frequency signals is defined as a single stage filter by a resistor 32 and the two capacitors 33 (see col. 8, line 66 to col. 9, line 9).

Hence, Dodds et al. neither discloses nor suggests use of a common mode choke, let alone a common mode choke for isolating capacitive influences, as claimed. Rather, Dodds et al. teaches the use of a bulky transformer 27 for removing DC current and stepping down the peak-to-peak voltage of the LAN signals by a ratio of 8:1.

Hence, the hypothetical combination of Shimada et al., Hartmann et al., and Dodds et al. would neither disclose nor suggest the features of claim 2. For these and other reasons, the rejection of claim 2 should be withdrawn.

The indication of allowable subject matter in claims 3-7 is acknowledged and appreciated. It is believed these claims are allowable in view of the foregoing.

The allowance of claims 8-12 is acknowledged and appreciated.

In view of the above, it is believed this application is in condition for allowance, and such a Notice is respectfully solicited.

Response filed March 17, 2004

Appln. No. 09/495,122

Page 5

To the extent necessary, Applicant petitions for an extension of time under 37 C.F.R. 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including any missing or insufficient fees under 37 C.F.R. 1.17(a), to Deposit Account No. 50-0687, under Order No. 95-304, and please credit any excess fees to such deposit account.

Respectfully submitted,



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**Date: March 17, 2004**

Response filed March 17, 2004

Appln. No. 09/495,122

Page 6